THE JOURNAL OF HAND SURGERY

British Volume 11B

Official Journal of The British Society for Surgery of the Hand

British Volume
Editor: Graham Stack
Assistant Editor: Nicholas Barton

Editorial Office
Graham Stack
Westhay, Mount Avenue
Hutton, Brentwood
Essex, CM13 2PB, U.K.

Editorial Board
Kenneth Backhouse, *London*
Harold Bolton, *Stockport*
Frank Burke, *Derby*
John Colville, *Belfast*
David Dunkerley, *Bath*
Geoffrey Fisk, *London*
James Harvey Kemble, *Billericay*
Douglas Lamb, *Edinburgh*
Angus McGrouther, *Glasgow*
Ian Muir, *Aberdeen*
Douglas Campbell Reid, *Sheffield*
Robert Robins, *Truro*
Paul Smith, *London*
C. B. Wynn Parry, *London*
Adrian E. Flatt, *Dallas*

Editorial Management Committee
Robert Robins, *Truro, (Chairman)*
Kenneth Backhouse, *London*
Nicholas Barton, *Nottingham*
David Dunkerley, *Bath*
James Harvey Kemble, *Billericay*
John Varian, *Dublin*
Graham Stack, *Brentwood*

American Volume
Editor in Chief: Adrian E. Flatt
Assistant Editor: F. William Bora Jr.
Chairman: Lee W. Milford

Editorial Office
Adrian E. Flatt, Dept. of Orthopaedics
Baylor University Medical Center
3500 Gaston Avenue
Dallas, Texas, U.S.A. 75246

Associate Editors
Earl Z. Browne Jr., *Philadelphia*
Richard H. Gelberman, *San Diego*
Francis M. Howard, *Bradenton*
Michael E. Jabaley, *Jackson*
John C. Kelleher, *Toledo*
Graham D. Lister, *Louisville*
Mary H. McGrath, *New York*
Paul R. Manske, *St. Louis*
Robert J. Neviaser, *Washington, D.C.*
Andrew K. Palmer, *Syracuse, N.Y.*
Lawrence H. Schneider, *Philadelphia*
Barry P. Simmons, *Boston*
Paul M. Weeks, *St. Louis*
Andrew J. Weiland, *Baltimore*
Virchel E. Wood, *Loma Linda*
Elvin G. Zook, *Springfield Ill.*

Corresponding Editors, British Volume

Eduardo Zancolli, *Argentina*
John T. Hueston, *Australia*
Hanno Millesi, *Austria*
Edouard Vander Elst, *Belgium*
Ivan Matev, *Bulgaria*
Robert M. McFarlane, *Canada*
Andreas P. Weilby, *Denmark*
Wael Fahmy, *Egypt*
Kauko Solonen, *Finland*
Jacques Michon, *France*
Dieter Buck-Gramcko, *Germany*
Basil Petropoulos, *Greece*
Noshir Antia, *India*
Joel Engel, *Israel*
Vittorio Salvi, *Italy*
Kenya Tsuge, *Japan*
Jacques van der Meulen, *Netherlands*
William Gillespie, *New Zealand*
Halfdan Schelderup, *Norway*
Manuel Serra Costa, *Portugal*
Dennis Walker, *South Africa*
Henry Nigst, *Switzerland*
Robert M. McCormack, *United States*

© **THE BRITISH SOCIETY FOR SURGERY OF THE HAND**
At the Royal College of Surgeons, Lincoln's Inn Fields, London WC2A 3PN

Published for the Society
by Churchill Livingstone
Edinburgh, ISSN 0226-7681
(formerly 0072-986X)

Printed by The Pilgrims Press
Caxton House
Ongar, Essex CM5 9RB
England
0277 364060

THE JOURNAL OF HAND SURGERY

British Volume 11B Number One February 1986

Contents

Problems in Managing Reconstructive Surgery for Brachial Plexus Lesions Contrasted with Peripheral Nerve Lesions.	*Victoria Frampton, Stanmore*	1
Blood Flow of Peripheral Nerve. Effects of Dissection, Stretching and Compression	*K. Ogata & M. Naito, Kyushu, Japan*	10
The Relationship Between Cold Intolerance and Cutaneous Blood Flow in Digital Replantation	*E. Freedlander, Glasgow*	15
Finger Reconstruction Using Toe Transplantation	*P. C. Leung, Hong Kong*	20
Reconstructive Surgery of the Post-Burn Boutonnière Deformity	*F. Groenevelt & R. Schoorl, Beverwijk, The Netherlands*	23
Total Thumb Reconstruction by an Index Finger Transposition	*H. Takami, S. Takahashi & M. Ando, Kawasaki, Japan*	31
Partial Thumb Reconstruction using the Proximal Skin Paddle Radial Artery Island Flap	*B. A. Matti, A. Quaba & R. E. Page, Billericay*	35
Single Stage Lengthening by Intercalary Bone Graft in Patients with Congenital Hand Deformities	*C. W. Fultz, D. K. Lester & J. M. Hunter, Pennsylvania*	40
Multiple Dislocations of the Carpometacarpal Joints	*O. O. A. Oni & R. P. Mackenny, Watford*	47
Irreducible Compound Dorsal Dislocations of the Proximal Interphalangeal Joint of the Finger	*I. Kjeldal, Sorø, Denmark*	49
Volar Dislocation of the Metacarpophalangeal Joint of the Thumb — A Case Report	*M. Miyamoto, T. Hirayama & M. Uchida, Asahikawa, Japan*	51
Fibrin/Fibrinogen and Fibrinolytic Activity of the Palmar Fascia in Dupuytren's Contracture	*G. Merlo, G. P. Ambroggio, B. Castagna, A. Mosca & E. Oberto, Turin, Italy*	55
Antibodies to Collagen Types I-VI in Dupuytren's Contracture	*R. S. Pereira, C. M. Black, S. M. Turner & J. D. Spencer*	58
Dupuytren's Contracture in the Negro	*U. Mennen, Pretoria, South Africa*	61
Ischaemic Contracture of the Intrinsic Muscles of the Hands. A Hazard of Physical Restraint	*P. McL. Smith, P. D. Burge & N. A. Watson, Oxford*	65
Dupuytren's Disease in the Thumb: Two Cases of a Central Cord	*Heather Cleland & W. A. Morrison, Melbourne, Australia*	68
Primary Flexor Tendon Repair: The Mechanical Limitations of the Modified Kessler Technique	*P. J. F. Wade, I. F. K. Muir & L. L. Hutcheon, Aberdeen*	71
The Excursions of the Long Extensor Tendons of the Hand	*D. Elliot & D. A. McGrouther, Glasgow*	77
Trapezius Transfer for Paralysis of the Deltoid	*A. Karev, Haifa, Israel*	81
Palmaris Longus Transfer for Replacement of the First Dorsal Interosseous	*T. Hirayama, Y. Atsuta & Y. Takemitsu, Asahikawa, Japan*	84
Spontaneous Rupture of the Extensor Pollicis Longus Tendon after Anabolic Steroids	*M. Kramhøft & S. Solgaard Hillerød, Denmark*	87
Continuous Passive Motion as an Adjunct Therapy for Tenolysis	*J. A. McCarthy, P. A. Lesker, W. W. Peterson & P. R. Manske, St. Louis, Missouri*	88
Assessment of Thumb to Index Pulp to Pulp Grip Strengths	*W. E. Hook & J. K. Stanley, Wigan*	91
The Early Experience of Silastic Trapezium Implants	*W. E. Hook & J. K. Stanley, Wigan*	93
Comparison of Conservative Treatment and Silicone Replacement	*G. Evans, F. D. Burke & N. J. Barton Nottingham*	98
The role of Internal Fixation in Closed Fractures	*H. N. Diwaker & J. Stothard Warrington and Middlesborough*	103
Lateral Approach to the Hook of Hamate for its Fracture	*T. Mizuseki, Y. Ikuta, T. Murakami & S. Watari, Hiroshima, Japan*	109
Simultaneous Fracture of Carpal Scaphoid and Trapezium	*P. Van Schil & C. De Smet, Antwerp*	112
Shingles Following Axillary Nerve Block A Case Report	*N. J. Percival, Chepstow*	115
Effect of Submuscular Versus Intramuscular Placement of Ulnar Nerve:	*A. L. Dellon, S. E. MacKinnon, A. R. Hudson & D. A. Hunter, Baltimore & Toronto*	117
Elbow Arthrography in the Evaluation of Posterior Interosseous Nerve Compression in Rheumatoid Arthritis	*A. I. Roth, B. N. Stulberg, E. J. Fleegler & G. H. Belhobek, Cleveland, Ohio*	120
Acute Cubital Tunnel Syndrome from Post Traumatic Calcific Neuritis	*K. Ametewee, Barbados*	123
Use of Bromphenol Blue Printing Method for Detecting Sweat on the Palm	*M. Sakurai, Sendai, Japan*	125
The Micropathology of the Typical Carpal Tunnel Syndrome	*D. K. Faithfull, D. H. Moir & J. Ireland, Sydney, Australia*	131
Isolated Palsy of the Nerve to Flexor Pollicis Longus	*D. J. Klugman & D. S. Kaltsas, Canterbury*	133
An Unusual Foreign Body in the Hand — A Case Report	*N. Mathur, K.K.R. Sharma & V.K. Tiwari, Jaipur, India*	135
Sarcoidosis Presenting with Pathological Fracture of a Metacarpal	*P. G. Lunn, R. McGlone & J. P. W. Varian, Derby*	137
Malignant Transformation of a Benign Cutaneous Mixed Tumour	*A. Nather & I. H. Sutherland, Singapore*	139
Chondromyxoid Fibroma of the Proximal Phalanx. A Tumour that may be confused with Chondrosarcoma	*W. J. Anderson & W. H. Bowers, North Carolina*	144
An External Fixator in Finger Reconstruction	*L. Rosenberg & M. Kon, Beer-Sheba, Israel*	147
Malignant Fibrous Histiocytoma of the Second Metacarpal	*C. B. Mutale, P. S. Patil & J. B. Patel, Lusaka, Zambia*	149

THE JOURNAL OF HAND SURGERY

British Volume 11B Number Two June 1986

Contents

Frontispiece:	*Richard J. Smith*	153
Editorial: 'Tenosynovitis'	*Campbell Semple, Glasgow*	155
Sensory Threshold and Conductance Testing in Nerve Injuries	*P. J. Smith & G. Mott, Middlesex*	157
The Arterial Supply of the Thumb, First Web and Index Finger	*M. J. Earley, Chepstow, Gwent*	163
Musculotendinous Variations About the Medial Humeral Epicondyle	*A. L. Dellon, Baltimore, Maryland*	175
Use of a Wheel Aesthesiometer for Testing Sensibility in the Hand	*D. R. Marsh, Cambridge*	182
The Present Role of the Groin Flap in Hand Trauma in the Light of a Long-Term Review	*E. Freedlander, W. A. Dickson & D. A. McGrouther, Glasgow*	187
Tikhoff Procedure in Recurrent Chondrosarcoma Following Free Vascularised Fibular Graft	*V. P. Kumar & R. W. H. Pho, Singapore*	191
A Modified Midlateral Incision for Volar Approach to the Digit	*R. F. Hall & D. H. Vliegenthart, Chicago, Illinois*	195
The Incidence and Pattern of Hand Fractures in Children	*P. H. Worlock & M. J. Stower, Nottingham*	198
The Role of Carpal Instability in Scaphoid Nonunion: Casual or Causal?	*J. J. Monsivais, P. A. Nitz & T. J. Scully, El Paso, Texas*	201
Fracture of the Body of the Hamate Bone Associated with Compartment Syndrome	*M. A. Ali, Huddersfield*	207
Entrapment of the Ulnar Nerve in a Greenstick Fracture of the Ulna	*A. J. Prosser & G. Hooper, Edinburgh*	211
Correlation Between Clinical Results and Carpal Instabilities in Patients After Reduction of Lunate and Perilunar Dislocations	*A. Minami, T. Ogino, I. Ohshio & M. Minami, Sapporo, Japan*	213
An Unusual Cause of Wrist Pain	*J. C. Y. Cheng & L. K. Hung, Hong Kong*	221
Haemorrhagic, Traumatic Tenosynovitis	*D. J. Dacruz, A. M. Harris & J. Jones, Leicester*	223
Use of Bioprosthetic Tendon in Digital Pulley Reconstruction	*J. C. Y. Cheng, S. Y. C. Hsu, Y. W. Chong & P. C. Leung, Hong Kong*	225
Disappointing Outcomes in Staged Flexor Tendon Grafting for Isolated Profundus Loss	*D. J. Sullivan, St. Louis, Missouri*	231
Abducted Little Finger in Low Ulnar Nerve Palsy	*P. Burge, Headington, Oxford*	234
A Possible New Operative Method for the Treatment of Metacarpophalangeal Joint Stiffness	*A. R. Phipps & H. P. Henderson, Leicester*	237
Operative Correction of Posttraumatic and Congenital Swanneck Deformity	*R. P. Karthaus & G. J. I. M. Van Der Werf, Heerlen, The Netherlands*	239
Wrist Arthrodesis as Part of Composite Surgery of the Hand	*J. K. Stanley & M. G. Hullin, Wrightington, Lancashire*	243
Modified Instruments for Wrist Fusion	*J. K. Stanley, S. R. Gupta & M. G. Hullin, Wrightington, Lancashire*	245
Trapeziometacarpal Arthrodesis Today: Why?	*R. M. Cavallazzi & G. Spreafico, Milan, Italy*	250
Ulnar Variance Determination	*S. S. Kristensen, E. Thomassen & F. Christensen, Kolding, Denmark*	255
Ulnar Variance in Kienbock's Disease	*S. S. Kristensen, E. Thomassen & F. Christensen, Kolding, Denmark*	258
A Comparative Controlled Trial of a New Perforated Splint	*A. W. G. Kinninmonth & F. Holburn, Edinburgh*	261
A Modified Splint for Mallet Finger	*H. G. Stack, Brentwood, Essex*	263
Aspiration of Ganglia	*D. V. Nield & D. M. Evans, Slough, Berkshire*	264
Differential Diagnosis of Acute Dactylitis Psoriatica	*P. Brenner & C. Tizian, Hannover, Germany*	265
Insiduous Erosion of a Digit by a Ring	*S. Prasad, U. Patil & R. Thatte, Bombay, India*	269
Mycotic Aneurysms of the Upper Extremity	*P. K. Ho, M. J. Yaremchuk & A. L. Dellon*	271
Phialophora richardsiae Infection Mimicking a Soft Tissue Mass of a Finger	*F. A. Reyes & M. T. Buchman, Miami, Florida*	274
A Tendon Tumour Presenting as a Trigger Finger	*P. W. Laing, Slough, Berkshire*	275
Benign Tendon Sheath Chondroma	*W. A. Jones & M. S. Ghorbal, Liverpool*	276
Giant Cell Tumour of the Triquetrum	*D. S. Louis, F. M. Hankin & E. M. Braunstein, Ann Arbor, Michigan*	279
Sarcoid Tenosynovitis in the Hand	*M. Merle, C. Bour, G. Foucher & Y Saint Laurent, Nancy, France*	281
Hand Assessment Charts	*R. H. C. Robins, Truro, Cornwall*	287
Solitary Loose Body within the Flexor Tendon Sheath of the Little Finger	*M. A. Ali, Huddersfield*	299

THE JOURNAL OF HAND SURGERY

British Volume 11B Number Three October 1986

Contents

Frontispiece:	*K. M. Backhouse, OBE*	305
Soft-Tissue Anatomy of Mirror Hand	*N. J. Barton, D. Buck-Gramcko & D. M. Evans, Nottingham*	307
Mirror Hand Treated by True Pollicization	*N. J. Barton, D. Buck-Gramcko, D. M. Evans, H. Kleinert, C. Semple & H. Ulson, Nottingham*	320
Calcium-Induced Degeneration of The Cytoskeleton in Monkey and Human Peripheral Nerves	*M. A. Badalamente, L. C. Hurst & A. Stracher, Stony Brook, New York*	337
Pain after Radial Sensory Nerve Grafting	*A. L. Dellon & S. E. Mackinnon, Baltimore and Toronto*	341
Degenerated Muscle Grafts Used for Peripheral Nerve Repair in Primates	*M. A. Glasby, S. E. Gschmeissner, C. L-Huang, B. A. De Souza, London*	347
Tardy Ulnar Nerve Palsy Caused by Cubitus Varus Deformity	*T. Ogino, A. Minami & K. Fukuda, Sapporo, Japan*	352
Regional Bone Mineral Density Changes After Colles' and Forehand Fractures	*V. Finsen & P. Benum, Trondheim, Norway*	357
Percutaneous Accessory Collateral Ligament Release Treatment of Proximal Interphalangeal Flexion Contracture	*J. K. Stanley, W. A. Jones & M. C. Lynch, Wrightington*	360
Congenital Anomalies of The Upper Limb Among the Japanese in Sapporo	*T. Ogino, A. Minami & K. Fukuda, Sapporo, Japan*	364
Abductor Digiti Minimi Opponensplasty in Hypoplastic Thumb	*T. Ogino, A. Minami & K. Fukuda, Sapporo, Japan*	372
Anatomical Variations of the Extensor Pollicis Brevis	*S. Dawson & N. J. Barton, Nottingham*	378
The Incidence of a Palmaris Longus Tendon in Patients with Dupuytren's Disease	*B. W. E. M. Powell, N. R. McLean & J. V. Jeffs, Roehampton*	382
Postburn Nailfold Retraction — A Reconstructive Technique	*R. Ngim & K. Soin, Singapore*	385
Comparison of Microsurgical Transfer and Conventional Methods	*G. Foucher, P. Hoang, N. Citron, M. Merle & M. Dury, Strasbourg, France*	388
Fascio-Cutaneous Cross-Arm Flaps in Hand Reconstruction	*J. C. Dickinson & A. H. N. Roberts, Stoke Mandeville*	394
Functional Assessment After Pollicisation	*B. A. Roper & T. J. Turnbull, London*	399
One in Four Flexor Digitorum Superficialis Lasso for Correction of the Claw Deformity	*A. Shah, Bombay, India*	404
A Review of Total Elbow Arthroplasty and an Early Assessment of the Liverpool Elbow Prosthesis	*S. G. Sourmelis, F. D. Burke & J. P. N. Varian, Derby*	407
Primary Flexible Implant Arthroplasty of the Metacarpophalangeal Joints During Digital Replantation	*S. Kay & J. S. Watson, Manchester*	414
Osteosynthesis for the Unstable Fracture of the Hand	*H. K. D. Thakore, Saudi Arabia*	417
Kienbock's Disease — Late Results by Non-Surgical Treatment	*S. S. Kristensen, E. Thomasen & F. Christensen, Kolding, Denmark*	422
A Long-Term Study Following Bennett's Fracture	*S. R. Cannon, G. S. E. Dowd, D. H. Williams & J. M. Scott, London*	426
Trans-Triquetral Mid-Carpal Dislocation	*D. Nunn, London*	432
Scaphoid-Trapezium-Trapezoid Subluxation	*E. Kuur & A. M. Boe, Fredericia, Denmark*	434
Compressed Air Injuries of the Hand	*B. Klareskov, P. Gebuhr & P. Rørdam, Sorø, Denmark*	436
The Value of a Next Day Hand Injury Review Clinic	*B. J. Finlayson, A. B. Cross, M. J. Shalley & R. J. Cherry, Birmingham*	438
Post Mastectomy Brachial Plexus Palsy: Metastases of Radiation Neuritis?	*P. H. Hoang, D. J. Ford & F. D. Burke, Derby*	441
Studies on Tendon Healing — A Comparison Between Suturing Techniques	*H. L. A. Defino, C. Barbieri, R. P. Gonçalves & J. B. P. Paulin, Sao Paulo, Brazil*	444
Closed Rupture of Extensor Digitorum Communis Tendon Following Excision of Distal Ulna	*D. J. Pring & D. J. Williams, Welwyn Garden City*	451
Trigger Wrist due to Idiopathic Synovial Hypertrophy	*I. K. Pople, Norwich*	453
Acute Carpal Tunnel Syndrome Resulting From Haemorrhage into the Carpal Tunnel in a Patient on Warfarin	*C. Nkele, Nigeria*	455
Trigger Wrist Caused by Partial Laceration Flexor Superficialis Tendon of Ring Finger	*A. Minami & T. Ogino, Sapparo, Japan*	457
Cubital Canal Syndrome Due to Subanconeus Muscle — A Case Report	*E. Sucher & D. Herness, Tel-Aviv, Israel*	460
Oestrogen & Progesterone Hormone Receptors in Dupuytren's Disease	*F. M. Hankin, J. Eckenrode & D. S. Louis, Ann Arbor, Michigan*	463
Leukonychia Totalis	*S. L. Kates, G. D. Harris & D. J. Nagle, Chicago, Illionois*	465
A Seven-Year-Old Girl With Orf of The Hand	*M. A. Waldram, Coventry*	467
Exsanguination of The Upper Limb in Hand Surgery Comparison of Four Methods	*J. Colville & J. O. Small, Belfast*	469
Synovial Sarcoma of The Hand — A Literature Study	*U. Y. Dreyfuss, R. S. Boome & D. H. Kranold, Cape Town, South Africa*	471
Calcifying Synovial Sarcoma	*D. S. Louis, F. M. Hankin, E. M. Braunstein & R. M. Verklin, Ann Arbor, Michigan*	475
A Rare Case of Carpal Tunnel Syndrome Due to Tenosynovial Osteochondroma.	*A. Nather I P. Y. Chong, Singapore*	478
Obituary		481
Book Reviews		483
Letters to Editor		484
Notices		485